

CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) A non-aqueous electrolytic solution for a lithium secondary battery which comprises an electrolyte salt in a non-aqueous solvent, which contains a tert-alkylbenzene compound in an amount of 0.1 to 10 wt.% based on an amount of the solution and which further contains a benzene compound having a benzene ring substituted with a hydrocarbon group having 1 to 4 carbon atoms via at least one tertiary carbon atom, in an amount of 0.001 to 0.5 wt.% based on the amount of the solution 0.5 wt.% or less and more than 0.001 wt.% based on the amount of the tert-alkylbenzene compound.

2. (Original) The non-aqueous electrolytic solution of claim 1, wherein the tert-alkylbenzene compound is tert-butylbenzene, and the benzene compound having the benzene ring substituted with the hydrocarbon group having 1 to 4 carbon atoms via at least one tertiary carbon atom comprises sec-butylbenzene and/or isopropylbenzene.

3. (Withdrawn) The non-aqueous electrolytic solution of claim 1, wherein the tert-alkylbenzene compound is tert-pentylbenzene, and the benzene compound having the benzene ring substituted with the hydrocarbon group having 1 to 4 carbon atoms via at least one tertiary carbon atom comprises isopropylbenzene, 1,2-dimethylpropylbenzene, 1,2-dimethylindan, 1,3-dimethylindan, and/or 1-methyltetrahydronaphthalene.

4. (Withdrawn) The non-aqueous electrolytic solution of claim 1, wherein the tert-alkylbenzene compound is 1,3-di-tert-butylbenzene, and the benzene compound having the benzene ring substituted with the hydrocarbon group having 1 to 4 carbon atoms via at least one tertiary carbon atom is 1-tert-butyl-3-isopropylbenzene.

5. (Withdrawn) The non-aqueous electrolytic solution of claim 1, wherein the tert-alkylbenzene compound is 1,4-di-tert-butylbenzene, and the benzene compound having the

benzene ring substituted with the hydrocarbon group having 1 to 4 carbon atoms via at least one tertiary carbon atom is 1-tert-butyl-4-isopropylbenzene.

6. (Withdrawn) The non-aqueous electrolytic solution of claim 1, wherein the tert-alkylbenzene compound is 4-fluoro-tert-butylbenzene, and the benzene compound having the benzene ring substituted with the hydrocarbon group having 1 to 4 carbon atoms via at least one tertiary carbon atom comprises 4-fluoro-isopropylbenzene and/or 4-fluoro-sec-butylbenzene.

7. (Withdrawn) The non-aqueous electrolytic solution of claim 1, wherein the tert-alkylbenzene compound is 4-tert-butylbiphenyl, and the benzene compound having the benzene ring substituted with the hydrocarbon group having 1 to 4 carbon atoms via at least one tertiary carbon atom is 4-sec-butylbiphenyl.

8. (Withdrawn) The non-aqueous electrolytic solution of claim 1, wherein the tert-alkylbenzene compound is 1,3-di-tert-pentylbenzene, and the benzene compound having the benzene ring substituted with the hydrocarbon group having 1 to 4 carbon atoms via at least one tertiary carbon atom is 1-tert-pentyl-3-isopropylbenzene.

9. (Withdrawn) The non-aqueous electrolytic solution of claim 1, wherein the tert-alkylbenzene compound is 1,4-di-tert-pentylbenzene, and the benzene compound having the benzene ring substituted with the hydrocarbon group having 1 to 4 carbon atoms via at least one tertiary carbon atom is 1-tert-pentyl-4-isopropylbenzene.

10. (Withdrawn) The non-aqueous electrolytic solution of claim 1, wherein the tert-alkylbenzene compound is 1-tert-butyl-4-tert-pentylbenzene, and the benzene compound having the benzene ring substituted with the hydrocarbon group having 1 to 4 carbon atoms via at least one tertiary carbon atom is 1-tert-butyl-4-isopropylbenzene.

11. (Original) A lithium secondary battery comprising a positive electrode, a negative electrode and a non-aqueous electrolytic solution comprising an electrolyte salt in a non-aqueous

solvent, wherein the non-aqueous electrolytic solution is the non-aqueous electrolytic solution defined in claim 1.

12. (Withdrawn) A method for preparing a pure tert-alkylbenzene compound, which comprises subjecting a reaction product which is obtained by alkylation of a benzene compound and which contains a benzene compound having a benzene ring substituted with a hydrocarbon group having 1 to 4 carbon atoms via at least one tertiary carbon atom to photo-halogenation.